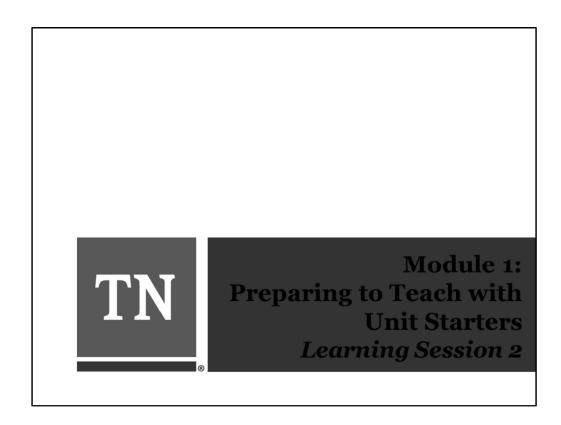


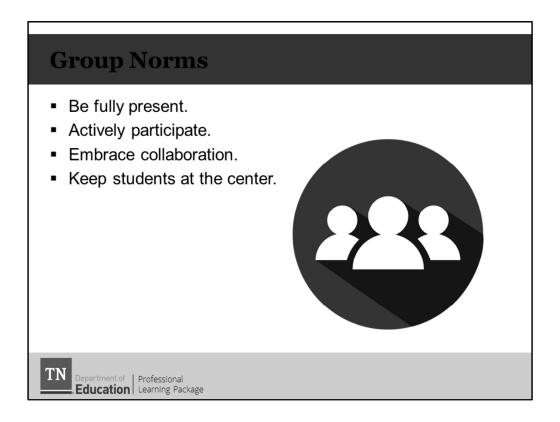
Professional Learning Package: Implementing Unit Starters



Module 1 Learning Sessions				
	Session	Guiding Questions		
	1√	<ul> <li>What is a Unit Starter?</li> <li>Why teach with Unit Starters?</li> <li>What resources are included in the Unit Starter?</li> <li>How do Unit Starters support standards-based instruction?</li> </ul>		
	2	<ul> <li>How are concepts and understandings organized in the Unit Starter?</li> </ul>		
	3	<ul> <li>How are concepts and understandings supported by the Unit Starter's texts, tasks, and question sequences?</li> </ul>		
	4	How can I prepare to teach with the Unit Starter?		
	TN Departme	nt of   Professional <b>tion</b>   Learning Package		

**Time**: 1 min - 0:01

**Script**: "During our last learning session we addressed four guiding questions that dealt with what Unit Starters are, what's included in them and what's not, how they support standards-based teaching, and why they're worth teaching. In this session we will focus on learning more about how the unit is organized."



**Time**: 1 min – 0:02

**Script**: Review session norms.

# Revisiting Session 1: Learning to Application

What additional insights or reactions did you have as you read through your Unit Starter?



**Time**: 3 min - 0:05

**Script**: "At the end of the last learning session we were given the task of exploring our Unit Starter in greater depth on our own. As you did this, what additional insights or reactions did you have?" Have educators discuss quickly in trios or small groups, then have a few educators share their responses with the whole group.

# **Learning Session 2**

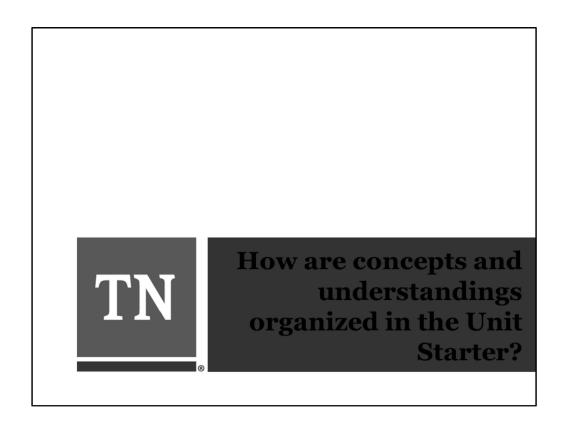
- Guiding questions:
  - How are concepts and understandings organized in the Unit Starter?
    - What are universal concepts and unit concepts?
    - What are enduring understandings and essential questions?
    - What are disciplinary understandings and guiding questions?

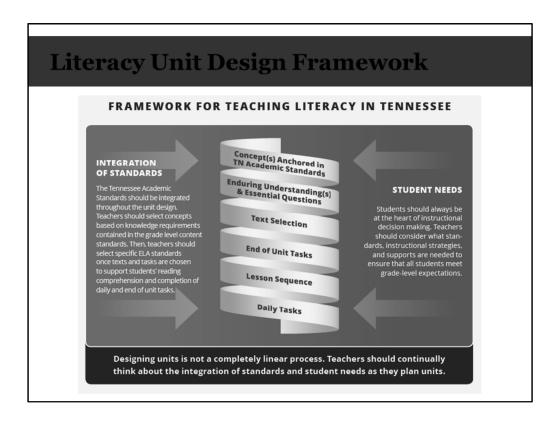


**Time**: 1 min – 0:06

**Script**: "These are the guiding questions for our learning session today. We're going to dig in to a lot of these terms, like universal concept and enduring understanding, and build our understanding of how they all fit together to form a unit that builds students' conceptual understanding." You may want to ask if any educators know these terms or have experience with a unit planning model like this.

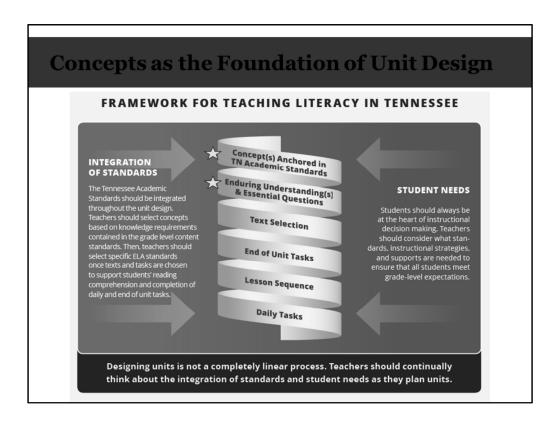
**Additional Facilitator Information:** There is no Part A or Part B in this session. The entire learning session can be completed in 50 min.





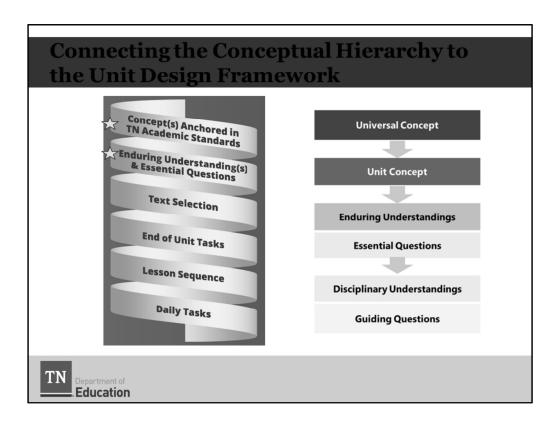
**Time**:  $1 \min - 0.07$ 

**Script**: "Let's start by revisiting the unit design framework that we looked at during our last session. The literacy unit design framework outlined in Teaching Literacy in Tennessee highlights the ways that teachers can use literacy-based instructional strategies, multiple sources of data, and differentiation to provide effective Tier I instruction to ALL students. We want to develop Tier 1 literacy practices that increase students access to complex text and build their world knowledge and vocabulary, while continuing to support explicit and systematic foundational skills instruction. We want to ensure that our literacy instruction is providing a balance of both skills-based and knowledge-based competency instruction."



**Time**: 1 min – 0:08

**Script**: "In creating the structure for Unit Starters, the Unit Design Framework expands these two starred pieces into a conceptual hierarchy that we will view on the next slide. This conceptual hierarchy help us to think about how to teach more conceptually and how to support students in learning the enduring understandings and answering the essential questions."



**Time**: 1 min – 0:09

**Script**: "Using the top two layers of the unit design framework, on the left, the model of a conceptual hierarchy is expanded, on the right. As you can see, the concepts are organized in a hierarchy, with big universal concepts up top, and more specific disciplinary understandings at the bottom. We're going to dig into each layer of the conceptual hierarchy soon."

# **Comparing First Grade Tasks**

### Example #1

Complete the pages in the "My Space Book." On each of the following pages, write at least two facts you learned from the unit:

- The Earth
- The Sun
- · The Stars
- · The Moon

### Example #2

With a partner, create a poster that shows how the sky looks different at different times of the day. Your poster should include drawings and captions related to day and night on Earth, the phases of the moon, and the sun and stars.

What kind of knowledge do these tasks require?



**Time**: 6 min – 0:15

**Script**: "Before we take a closer look at the conceptual hierarchy, though, let's take a minute to think about how conceptual teaching is good for students. To do so, we're going to look at examples of tasks from three different first grade units. All three units relate to outer space. With a partner, analyze the two tasks on this slide. As you do, talk about and compare the kind of knowledge that students would need to complete each task." Invite a few educators to share their responses with the group.

#### **Additional Facilitator Information:**

Example 1 asks children to lists facts. It does not require an understanding of relationships, like how the moon and Earth rotate around the Sun, or how those relationships affect what we see and know about outer space.

Example 2 asks children to draw pictures and captions. Similarly, students are not asked about relationships between different bodies in space or ask them to explain why the sky looks different at different times.

# **Comparing First Grade Tasks**

#### Example #3

You are an astronomer working for U.S. Space and Rocket Center. You have been asked to create a student-friendly brochure that you will share with students during a school field trip that explains (1) observable patterns in the day and night sky, (2) the seasons that impact Earth, and (3) the phases of the moon. Use illustrations and descriptions to explain these observable patterns. Your brochure should include:

- a front cover that illustrates and names the topic of the brochure;
- a section that illustrates and describes observable patterns from the day and night sky and explains why we observe those patterns;
- a section that illustrates and describes the pattern in Earth's seasons and explains why changes in season occur; and
- a section that illustrates and describes phases of the moon and explains why we observe those patterns.

#### Be sure to:

- provide some sense of closure;
- · use details from the texts we have read; and
- use vocabulary words from the word display in our unit.

# What kind of knowledge does this task require?

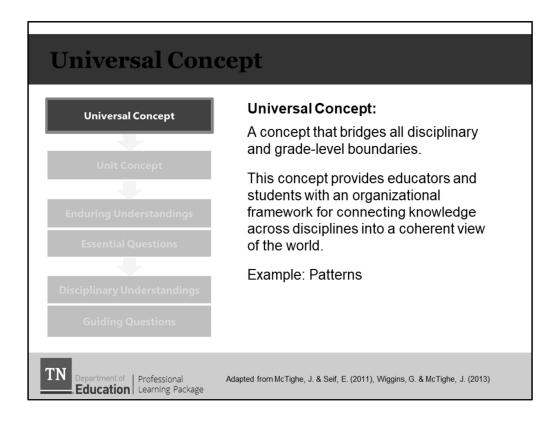


**Time**: 4 min – 0:19

**Script**: "Now let's look at another example. As you read this task, think about the kind of knowledge it requires of students." Invite educators to discuss the question with a partner and then to share with the whole group.

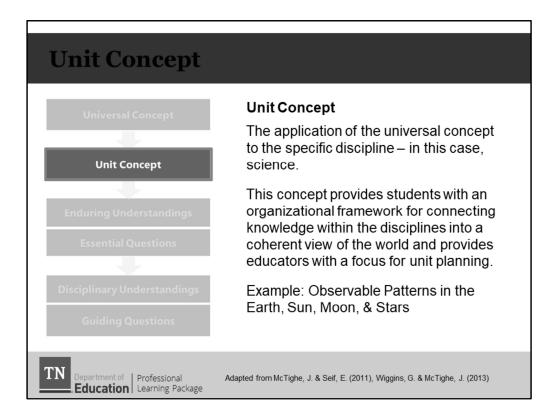
#### Additional Facilitator Information:

This task requires students to describe observable patterns and explain why they occur. Having to explain why these patterns occurs requires students to understand the relationships between different bodies in space and the way they move. It also sets the task within a meaningful context – students are astronomers working to share their knowledge with other students.



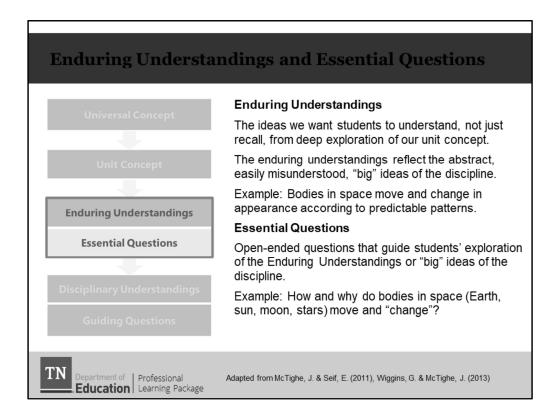
**Time**:  $2 \min - 0.21$ 

**Script**: "Now let's take a look at the conceptual hierarchy that's connected to the task we just looked at. These examples come from the first grade Unit Starter on space. We'll begin by defining each term and then looking at an example. The conceptual hierarchy begins with a universal concept. A universal concept is a concept that bridges all disciplinary and grade-level boundaries. That means the same concept is relevant to a range of subject areas, such as science, social studies, or fine arts. The universal concept provides educators and students with an organizational framework for connecting knowledge across subjects. Universal concepts help students develop a coherent view of how the world works. An example of a universal concept is patterns. There are patterns in mathematics, in nature, in economics, in music, etc. Patterns is a universal concept that stretches across a range of disciplines."



**Time**: 2 min – 0:23

**Script**: "A Unit Concept takes the universal concept and pulls it into a specific domain or discipline. Unit concepts provide students with an organizational framework for connecting knowledge within each discipline. For example, it helps them organize key concepts related to science. Unit Concepts help students form a coherent view of the world in regards to specific disciplines. Unit Concepts also provide educators with a focus for unit planning. Here, we take the universal concept of patterns and apply it to earth and space science. Specifically, we're thinking about patterns that can be observed in the Earth, sun, moon, and stars."

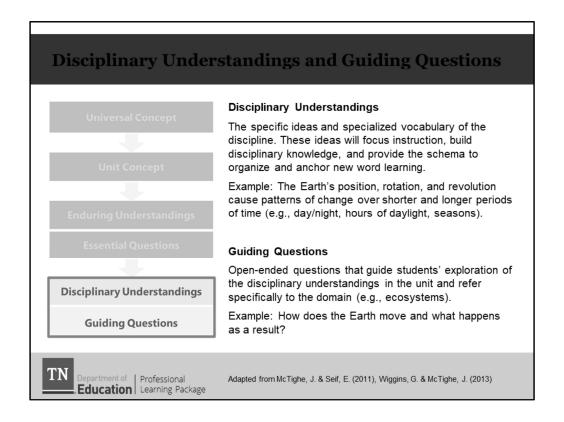


**Time**: 2 min – 0:25

**Script**: "Enduring Understandings and Essential Questions are the ideas we want students to understand, not just recall, from deep exploration of our unit concept and the corresponding open-ended questions that will guide students' exploration of these ideas. The Enduring Understandings reflect the abstract, easily misunderstood, "big" ideas of the discipline. They answer questions like "Why?" "So what?" and "How does this apply beyond the classroom?" to support deep levels of thinking. These questions spark genuine and relevant inquiry and provoke deep thought and lively discussion that will lead students to new understandings."

"If students are studying observable patterns in space, a key understanding is that bodies in space move and change in appearance according to predictable patterns. Knowing that bodies in space move and change is importance for understanding patterns. To help students get to this enduring understanding, we can pose this question: How and why do bodies in space move and change?"

Additional Facilitator Information: There is animation on this slide. Click twice.



**Time**:  $2 \min - 0.27$ 

**Script**: "The disciplinary understandings and guiding question are the more focused piece of the content goals. They are different from the essential questions and enduring understandings because they are specific ideas and specialized vocabulary of the discipline.

The disciplinary understandings and guiding question will focus instruction, build disciplinary knowledge, and provide the schema to organize and anchor new words. Student understanding of these key ideas is critical to investigation and understanding of the more abstract and transferable ideas outlined in the Enduring Understandings. These questions prompt ways of thinking and perceiving that are the province of the expert.

If students are to answer the essential question of how and why do bodies in space move and change, they need to understand that the Earth's position, rotation, and revolution cause patterns of change over shorter and longer periods of time. They need to understand that the way the Earth moves is related to how we experience day and night and the changing seasons. To help students understand these disciplinary understandings, we can ask them guiding questions, such as how does the Earth move and what happens as a result?"

Additional Facilitator Information: There is animation on this slide. Click twice.

Conceptual Hierarchy Example				
	Universal Concept	Patterns		
	Unit Concept	Observable Patterns in the Earth, Sun, Moon, and Stars		
	Enduring Understanding	Observations over time help us detect, describe, and predict patterns of movement and change in bodies in space.		
	Essential Question	How do we know that bodies in space move and change? How can we tell?		
	Disciplinary understanding	Patterns in what we observe in the night sky are caused by movements and/or changing positions of the Earth and moon.		
	Guiding Questions	When and why does what we "see" (observe) in the night sky change?		
	TN Department of Education Professional Learning Package			

**Time**:  $4 \min - 0.31$ 

**Script**: Allow teachers time to review and analyze the full example on the slide. Ask teachers to discuss what the different layers represent and how they connect together. Below are some key pieces of the example to draw teachers' attention to if needed.

**Universal Concept:** This is timeless and transferrable across content areas and grade levels. There are also clear opportunities to connect learning horizontally across subjects and vertically across grades to provide a framework for connecting knowledge into a coherent view of the world.

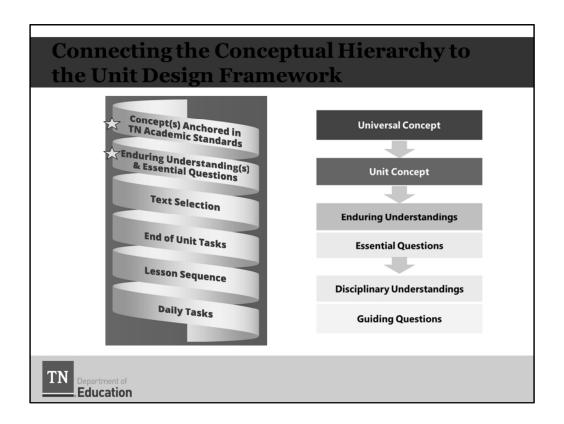
**Unit Concept:** This applies the universal concept to grade-level science standards, providing a focus for unit planning and students with an organizational framework.

**Enduring Understanding:** Reflects the desired results of the inquiry (i.e. these provide answers to the essential questions below). These also reflect the abstract, easily misunderstood, "big ideas" of this domain and answers questions like "Why?" and "How does this apply beyond the classroom?"

**Essential Question:** Reflects authentic, real-world questions students might ask themselves, rather than questions only asked in school. One cannot simply "Google" the answer to these, and they provoke deep thought from first graders that could result in lively discussion and new understandings about our world.

**Disciplinary Understanding:** These reflect content-specific knowledge students will gain from deep engagement with rich texts related to the unit concepts. They also serve as building blocks that, over the course of the unit, will allow students to arrive at the enduring understandings.

**Guiding Questions:** These questions guide students to engaging deeply with rich texts related to the disciplinary standard(s) and provoke deep thought and lively discussion that will lead students to new understandings within the unit texts



**Time**: 1 min – 0:32

**Script**: "Remember this graphic from the beginning of the session? While the conceptual hierarchy is an expansion of the first two layers of the unit design framework, the Unit Starters reflect the rest of the unit design framework as well."

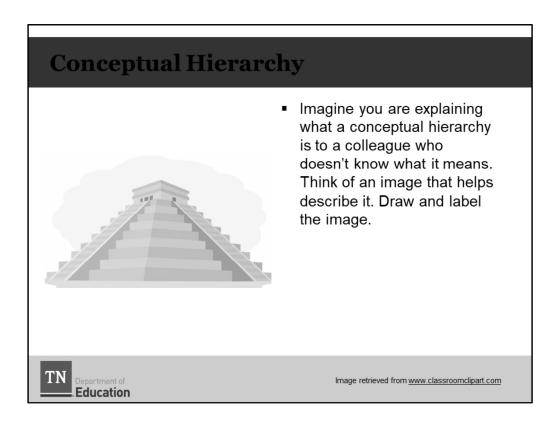
# **Connecting the Conceptual Hierarchy to the Unit Design Framework**

- Enduring understandings and essential questions are:
  - Inspired by the Tennessee Academic Standards
  - Explored through rich and complex texts
  - Developed through daily and end-of-unit tasks
- Disciplinary understandings and guiding questions are:
  - Supported by a purposeful sequence of lessons and readings
  - Organized in ways that build toward the enduring understandings and essential questions
  - Developed through daily and end-of-unit tasks



**Time**:  $1 \min - 0.33$ 

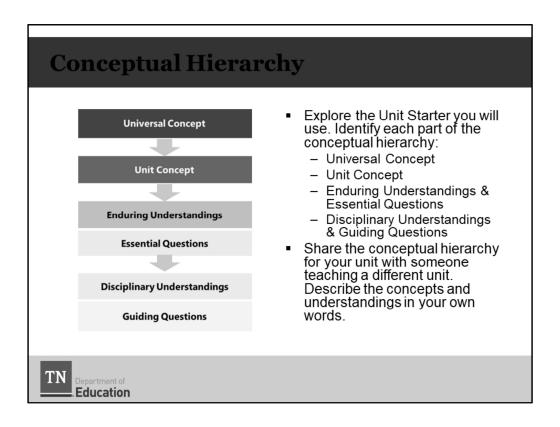
**Script**: "We'll talk more the relationship between the conceptual hierarchy and texts, lessons, and tasks in the next learning session, but it's worth pausing and thinking about how them here." Read the bullets on the slide.



**Time**: 5 min - 0:38

**Script**: Read the directions for the activity. Encourage educators to think outside the box. All answers are correct – this activity is supposed to help educators process what they have learned so far. Give educators three minutes to draw and then take two minutes to share.

**Additional Facilitator Information:** Image of pyramid comes from www.classroomclipart.com



**Time**: 6 min - 0:44

**Script**: Read the directions and facilitate the activity. Invite a few educators to share their conceptual hierarchies – explained in their own words – with the whole group.

# **Closing Reflection**

- How is the organization of the Unit Starter similar or different from the unit framework you're using right now?
- How might the organization of the Unit Starter's concepts and understandings support increased student learning?
- What about the organization of the Unit Starter might be challenging for teachers and/or students?



**Time**: 4 min - 0:48

**Script**: Read the reflection questions. Have educators discuss in partners or trios and then invite a few educators to share their responses with the whole group.

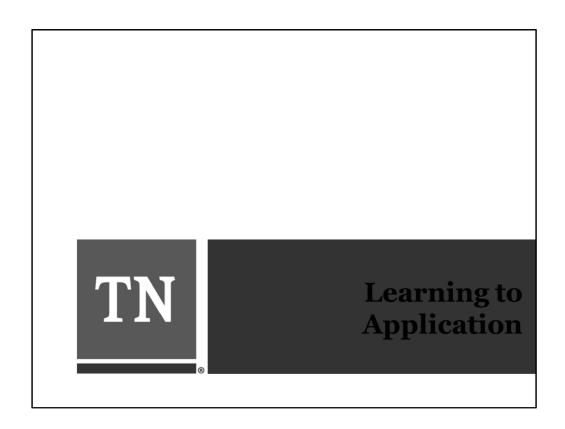
# **Learning Session Summary**

- In Learning Session 2, we addressed these questions:
  - How are concepts and understandings organized in the Unit Starter?
- In Learning Session 3, we will address these questions:
  - How are concepts and understandings supported by:
    - · texts;
    - the end-of-unit task;
    - · lesson sequences and daily tasks; and
    - · daily question sequences for each reading?



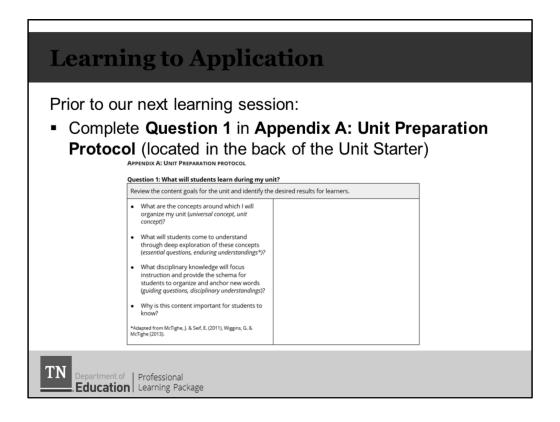
**Time**:  $1 \min - 0.49$ 

**Script**: Review the questions that were addressed in this session and preview the questions for the next session.



Time:

Script:



**Time**: 1 min - 0:50

**Script**: Read the directions for the activity. Have educators find Appendix A in their Unit Starter during this session and bookmark it. With extra time, ask educators what additional questions they have and add them to the list of questions you created during the first learning session. See if any of the questions raised in the first learning session were resolved during this one.

# For Learning Session 3

- Bring copies of the Unit Starter texts to the next learning session.
- If not all texts are available, prioritize finding texts for the first week's interactive read aloud and shared reading lessons.



Make sure educators know what to bring to the next learning session.



Districts and schools in Tennessee will exemplify excellence and equity such that all students are equipped with the knowledge and skills to successfully embark on their chosen path in life.

Excellence | Optimism | Judgment | Courage | Teamwork